# NORTH SHORE ARC



Box 171, Oshawa, ON, Canada, L1H 7L1 www.osha.igs.net/~lsolomon/nsarc



March 2005

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### Camp X needs you:

From Ray Zambonelli VE3OUB:

Mark May 28<sup>th</sup> and 29<sup>th</sup> 2005 on your calendars.

This year we would like to demonstrate some digital modes along with CW-SSB. This year we won't have "Air One" as they are very busy with Police work. There will be a larger display of military units, plus our display of Artifacts. We also hope to have some Paratroops drop in!

# Get your station connected with Anderson PowerPole Connectors (Part 1)

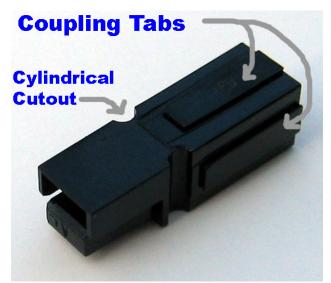
Article written by Keith Carcasole VA3DRS President of Durham Radio Sales & Service Inc.

As the average ham shack becomes more complicated there are more and more products operating on 13.8 VDC and more of a need for a decent DC quick disconnect. Years ago Molex plugs were often used as the DC power connection of choice on radio equipment. There are numerous variations of MOLEX plugs and manufacturers of radio equipment use several versions causing compatibility issues. Some used 6 pin connectors and others used 2 pin connectors plus there are several different styles. Due to the limited current handling of the connectors, two pins were often used in parallel to increase power handling. In an effort to standardize their equipment, hams would leave the DC power cable connected to the transceiver and use 2 or 4 pin trailer plug type connectors further down the power line for their "standardized" connection.



The trailer plugs have been around for as long as I can remember and although they're not of the highest quality, they have remained a popular choice due to their low cost and availability at automotive parts stores. These same connectors were often used on other DC equipment so there is some degree of standardization with these plugs even outside of the amateur community. The pins are polarized and the hot pin from the power source should always be connected to the insulated pin for safety. The connectors are commonly sold in pairs as shown in figure 1 above. Hams would often find that they had a surplus of one connector or the other and would sometimes cheat and use the wrong connector end in a pinch thus creating a opportunity for reversed connections down the road.

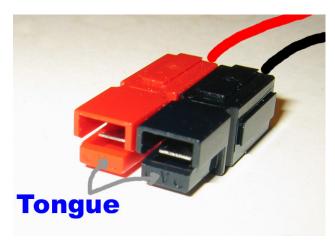
Today, the DC connector of choice is quickly becoming the Anderson Standard Powerpole® Single pole connectors. Numerous Amateur radio clubs and emergency radio services are adopting this connector as the new standard. The Single pole connectors can be stacked side by side or on top of each other.



A connector is comprised of two parts. A housing and a contact. The housings come in different colours and sizes and can accommodate contacts that can handle up to 180 amps. The housing commonly used by amateurs and emergency groups is the P15/45 and there are three different contacts that fit this housing. You can choose from 15, 30 or 45 amp contacts that will handle wire sizes from 10 to 20 gauge. The different contact sizes are compatible too. In other words, you can make up one connector with 45 amp contacts and you can plug a connector with 15 amp contacts into it!



Emergency groups have adopted a configuration of one black and one red connector side by side as their standard. Viewing from the contact side with the tongues facing down, the RED is the left contact. See figure 4. I recommend you choose this setup too as your standard setup to power your 13.8 VDC gear and use a different layout if you plan to use these connectors for other applications. There are numerous benefits of this connector over others commonly used in the past. Most notable is the fact that the housing is fireproof. This adds an element of safety to your setup. The contacts are silver plated so they have such a low resistance that it is unlikely that you'll have connections heating up anyway. The housing has a built-in leaf spring that exerts pressure on the contacts for a good connection. The connections are self-cleaning by design.



There are very few disadvantages to using this connector. One small disadvantage is that the connectors are non-polarized! That means that it is possible to connect a radio to another radio by accident. No harm in doing that but what happens if you connect two power supplies or two batteries together? There's a good chance that nothing will happen however it's not wise to do this. This disadvantage can in some situations work as an advantage. You can easily connect two power sources together such as a power supply and battery for charging purposes.

Assembly of the connectors is quite straightforward. Detailed instructions can be found on the Anderson web site at this link: http://www.andersonpower.com

The real crimper for this product is very expensive but the integrity of the connections made with this crimper is second to none. Our distributor reports that some people accidentally bend the contact while crimping with inexpensive crimpers and this will make it difficult or impossible to push the contact into the housing. Most hams opt to use an inexpensive crimper and then solder their connections.

As seen in Fig. 2. each housing has a half circle cutaway that appears to be made to accept a pin to hold housings together. When using lighter gauge wires, the housings will usually stay together without a pin (you can use a pin just in case). A pin isn't a good idea for connectors using heavy wire because the housings may pull away from each other and the pin could fall out and land in your gear! Instead a nice permanent bond can be made with a single drop of crazy glue. In a pinch, you can even use a soldering iron to "weld" the two pieces of plastic together!

In part two we'll look at some of the other products these connectors are compatible with and we'll offer some ideas on how you can use this connector in your shack.

Get 10 Red and 10 Black housings and 20 contacts for only \$10.95 or order parts separately on our web. Power bars with Anderson connectors also available. <a href="http://www.durhamradio.com">http://www.durhamradio.com</a>

# From The Chair in the Shack:

Spring is about to burst on us and there are several things most of us will be thinking of. Gone are the winter opportunities to meet and greet on 160, 80 and 40m as the thunderstorms begin to appear on the Canadian horizon. Apart from local nets, these bands will be harder and harder to bear. On the other hand, there might be some nice openings on 10m and on 6m. With luck, some of the storms will have troughs associated with them for long distance contacts on VHF and maybe on UHF. Until troughs show up (and we are kind of out of the normal trough locations), we can look to inversions for help.

To make those contacts will require antennas we can trust and, though it's not cold, now is a good time to begin antenna work. For those who think in terms of commercial units, think again. There are dozens of good books and internet articles to help you get you feet wet or your wire up. Even if you don't end up building, you can certainly get some idea of what works and what doesn't. Try <a href="http://www.cebik.com">http://www.cebik.com</a> for some great analysis and ideas. Although my antenna for HF here is commercially built, I have just as good luck with homebuilt copies of it. Almost anyone can build working antennas. Now is the time to begin.

On a more serious note, hamfest is coming on April 23 and we want to know that you are committed to helping fund the club with your efforts to get the show on the road. We need security, setters-up and takersdown. Again, with enough of us, there will be very little work for each and lots of time to shop. Let us know so that we don't die of fear on the run-up to the show.

Have a great spring, lots of radio fun, and good health.

73 de Pete

### Lest We Forget:

#### From Ray Zambonelli VE3OUB:

The Federal Government has declared this as the Year of the Veterans.

## Historic Special Event Call Sign to mark Opening of Canadian War Museum

Industry Canada has issued an authorization to Bob Cooke VE3BDB, to operate May 7 to 14 inclusive using the special event call sign CF3VEDAY.

# Special Prefixes Authorized to Celebrate Opening of the New Canadian War Museum and VE Day + 60

At the request of Radio Amateurs of Canada, Industry Canada has authorized all Canadian radio amateurs to use special event prefixes for the month of May 2005. This is to mark the opening of the new Canadian War Museum in Ottawa on May 8<sup>th</sup> 2005 coincident with the 60th Anniversary of VE Day.

Canadian radio amateurs are authorized to use the following special event prefixes during the period 1 May to 31 May 2005 inclusive:

CF for VA stations CG for VE stations CH for VO stations CI0 for VY0 stations CI1 for VY1 stations CI2 for VY2 stations.

Check out <a href="http://www.rac.ca">http://www.rac.ca</a> News.

April 18<sup>th</sup> 2005 marks the Annual Amateur Radio Day World wide. The International Amateur Radio Union (IARU) was Founded in 1925, now marks the 80th year. www.iaru.org

Well, I must have gotten too run down. The sinus infection that I thought was vanquished came back with a vengeance. I learned a couple of things again. One thing I learned is that you can get too tired having fun. The other is that you know you're really sick when listening for a possible QSO hurts. Imagine being stuck at home, too sick to use power tools, or more likely not so sick you can't remember the consequences and feeling so lousy you can't even play radio. Darn!!!

Your humble scribe. Ken VE3RMK

### Our Ad in the March/April Edition of TCA

#### **High Performance 2 Metre** Base Antenna



#### Comet CAABC23

Base/Repeater Antenna

Gain & Wave: 7.8dBi 5/8 wave x 3

VSWR: 1.5:1 or less Max Power: 200 watts

Length: 13' 4" Weight: 3 lbs. 8 ozs.

Mounting Mast Dia: 1.25 - 2.5"

Connector: SO-239

Construction: Aluminum, 3 sections

Only \$149.00

#### **Cushcraft MA6V Compact** 6 Band HF Antenna + 6 Metres



Covers 6-10-12-15-17-20 metres Gain: 1-2 dBi

VSWR Minimum: 1.2:1 All bands Power: 250 watts PEP Height: 14.7 Ft. (4.48 m)

Mast size: 1.25 - 2.0 inches Weight: 6.9 pounds (3.13 kg) Wind Surface: 0.82 sq. feet Wind Survival: >80 mph Connector: UHF

Only \$459.00

\$289.00

Includes

Remote

#### Car Stereo With Shortwave



Wouldn't it be great to be able to listen to shortwave stations while driving to work or when going on a long trip? The Sony XRF5100 AM/FM car stereo with shortwave coverage and cassette player includes wireless remote and can control a multi-CD or MD player. Standard DIN size fits almost any vehicle. Uses existing car radio antenna.

- Detachable face for added security
- Flip Down panel for access to cassette
- SW1 : 2940 7735 kHz
- $\mathrm{SW2}:9500$  to 10140 kHz plus 11575 to 18135 kHz
- FM : 87.5 108.0 MHz MW : 530 1710 kHz
- Programmable alpha tags allow you to name stored stations - Built-in MD/CD Changer Controller (for use with optional multi CD changerunit)
- 7 eaualizer presets
- Output power 4 x 52W
- 18FM/6MW/12SW presets
- Frequency step switch
- Includes wireless remote
- Mounting dimensions 178 x 50 x 181 (WxHxD) millimeters.

#### **New Power Supplies**

#### JTPS14

Fan cooled subcompact switching supply with separate



meters. Front panel voltage adjust control. 14A surge. Enough current to run modern 50W FM transceivers. \$109.00



JTPS28

A subcompact switching supply thats ideal for hams on the go. Supplies enough current to run most modern HF rigs but weighs only four pounds! It's footprint is SMALLER than a sheet of paper. 120/240 operation. Front panel terminals and lighter socket.

Only \$139.95

#### The Uniden SC230 is the perfect scanner for sports enthusiasts



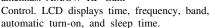
The SC230 is subcompact and preprogrammed with most racing frequencies. Can capture nearby active frequencies without programming. Typically stores up to 1600 channels. Instant access to 10 most popular frequencies using 0-9 keys. Coverage - 25-54, 108-174, 216-225, 400-512, 806-956, 1240-

1300 MHz (Excluding Cellular) DCS/CTCSS decode can instantly detects & display the tones in use. Preprogrammed service searches for public safety, rail, air, marine, CB, GMRS/FRS, weather, news etc.

\$299.00

#### **High Performance Shortwave**

The Grundig S350 has great audio and excellent sensitivity on AM/FM and shortwave bands. Continuous shortwave coverage from 2.3 to 27.41 MHz. Connection jacks for external speakers and antennas. AM/SW RF Gain



#### Refurbished with 1-Year Warranty Reg. \$89.00 Sale \$79.00

New units \$129.95 each

#### **Replacement Battery Sale**

Our aftermarket battery prices are the lowest around. Now you can save even more!

AB-BP173 Reg \$49.00 Sale \$41.65



Replaces the BP-173 and is rated at 9.6V 1000 mAh. Ni-MH Battery Pack for Icom IC-T22/ T42/T7/W31/W32, IC-Z1A/E, IC-F10/F20

#### AB-BP5CD Reg. \$99.00 Sale \$84.15



This pack is 10.8V and 600mAh and fits the following Icom radios: ICM5/M11/H2/H6/H12/U12/H16/ U16/2GAT/02AT/2AT/32AT, IC-A2/A20/A21 (Aviation)

AB-FNB10 Reg. \$49.00 Sale \$41.65



Replaces the FNB-10. 850mAh 7.2V NICAD

#### AB-FNB12H Reg. \$49.00 Sale \$41.65



Fits Yaesu radios: FT23R/33R/73R/411/811/911/ 470/2005/2008/2010/7005/7008/ 7010

#### AB-FNB27 Reg. \$59.00 Sale \$50.15



12 volt 600 mAh NI-CAD batttery pack works with Yaesu transceivers: FT26/76/415/815/ 416/816/530 etc.

#### AB-FNB41H Sorry, Sold out



ABFNB41 1000mAh 9.6V NIMH Battery Pack for Vertex/ Yaesu Transceiver Model Numbers FT10R/40R/50R/ VXA100 (AVIATION)

#### Sale \$75.65 AB-FNB72 Reg. \$89.00



FNB72 9.6V 2100mAh Ni-MH Battery Pack for Yaesu FT817 Transceiver

#### Not shown but also available.

AB-EBP26N AB-KCNB152H AB-KEBP22NH AB-PB14

Reg \$49.00 Sale \$41.65 Reg \$49.00 Sale \$41.65 Reg. \$54.95 Sale \$46.70 Reg. \$59.00 Sale \$50.15

All items subject to availability. Sale pricing ends ends April 30th, 2005





\*\* Now operating on Winter Hours \*\* MON.-FRI. 9:00 a.m. to 6:00 p.m.



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